## EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, OCTOBER, 1927

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General summary.—During the first decade general precipitation in the interior States was unfavorable in delaying field operations, as the soil was too wet to work in many places. The rains were excessive and damaging in some sections and, as a result of soft ground, considerable corn was blown down. The moisture was helpful in other places, however, being especially beneficial in the southern Piedmont. The soil was too dry in parts of the northern and west-central Great Plains and in some other western areas, but in general the principal agricultural States were well supplied with moisture.

During the second decade the weather was more favorable for agricultural interests, with generous rains in the theretofore droughty Southeast very helpful in conditioning the soil, while cool, dry, sunshiny weather in the interior valleys favored small-grain seeding. Soil conditions continued good generally and, while the weather was cool over the eastern half of the country, frost damage was mostly small, with the first general killing frost of the season much later than usual in most sections.

The last decade was exceptionally favorable for farming operations, the abnormally warm weather, abundant sunshine, and low humidity being ideal for drying out the corn crop, and seasonal farm work made good progress quite generally east of the Rocky Mountains. All the principal crops had matured at the close of the month and there was no longer any danger of material frost damage. Rain was needed in the Southeast and locally in the Ohio Valley and central-western sections, but precipitation was beneficial generally in practically all southern and central districts from the Rocky Mountains westward.

Small grains.—During the first decade seeding made slow progress in much of the Wheat Belt due to continued rains and wet soil, but the grain that had been seeded came up generally to a good stand and was making fine growth. Dry, sunshiny weather during the second decade was more favorable for late seeding and this work made good advance, while the generally favorable condition of the soil promoted rapid growth of newly seeded grain. West of the Mississippi River seeding had been mostly accomplished and the early seeded grain made good progress. During the last decade winter wheat, on the whole, continued to made good advance, but the late-seeded needed rain in Ohio and more moisture would have been beneficial in some other sections of the Ohio Valley area; otherwise from the Mississippi Valley eastward the soil was mostly in fairly good condition. More rain was needed in the southern Great Plains, especially in the western third of Kansas where the soil had become dry. In the far West, timely rains occurred in California and the Great Basin.

Corn.—During the first decade, with the prevailing warm weather, corn matured rapidly from Ohio and Kentucky eastward and northeastward and the crop was mostly safe from frost east of the Appalachain Mountains. There was still considerable immature corn

in the lower Ohio Valley, including Illinois, and also in eastern Iowa, but elsewhere throughout the country the crop was nearly all safe from frost. During the second decade the southern limit of killing frost advanced into the Corn Belt as far as northwestern and westcentral Illinois, and generally over Iowa, about 10 days later than normal. The damage was not great, however, as more than 80 per cent of the crop in Iowa was safe before frost came, although there was considerable harm locally to unmatured fields. The dry, sunshiny weather that prevailed was very favorable in drying out the crop. During the last decade ideal conditions for drying out corn obtained in all sections east of the Rocky Mountains, and gathering and cribbing had begun quite generally. The weather was especially favorable in Iowa where early grain was safe to crib, with husking well begun in parts of the west. Husking progressed in the Plains States and some was accomplised in Illinois and Indiana.

Cotton.—During the first decade temperatures were seasonable to rather high in the Cotton Belt and rainfall was mostly moderate to heavy. East of the Mississippi River there was some slight interruption by rains to picking, but this work made generally good progress. West of the Mississippi Valley there was some lowering of grade due to rains. Progress of late cotton was good in Arkansas, but in Oklahoma general deterioration was reported and harvest was delayed by rains and wet soil. In Texas too much rain in places delayed picking, lowered grade, and beat out some staple, but gathering was well advanced, except in the northwest. During the second decade generally fair and sunny weather permitted good progress in picking and ginning in the eastern half of the belt and this work was well along. West of the Mississippi River the dry weather made generally excellent conditions for harvest with late bolls developing well in Arkansas and the crop opening rapidly; picking and ginning advanced well elsewhere in the western belt. During the last decade conditions were generally favorable for harvest in the eastern part of the belt, with this work well up in most sections. In Arkansas bolls continued to develop on the overflowed land and picking was well along generally. The weather favored rapid harvest in Oklahoma, while in Texas gathering was about completed, except in the northwest and extreme west.

Miscellaneous crops.—General progress of pastures was poor in some southeastern sections due to continued dry weather, but in most other eastern areas they did well generally. Moisture was needed in southern New Mexico, but in most western sections favorable conditions prevailed. Livestock did well generally during the month and were moving to winter quarters at the close.

The weather was mostly favorable for potato digging, with this work nearing completion in northern sections at the close of the month. Truck needed rain rather badly in some areas of the Southeast, but otherwise did well. Excellent weather for sugar cane prevailed in Louisiana and cutting and grinding were beginning in a few places at the end of the month. Sugar beet harvest progressed well. Citrus in Florida was unfavorably affected by dry weather and was coloring slowly, but conditions were favorable in California.